

portion.

18. An electronic component unit, wherein an electrode (2) of an electronic component (1) is electrically connected to an electrode (5) of a circuit board (4) with a bump (3, 103) formed on the electrode (2) of the electronic component (1) and bonded to the electrode (5) of the circuit board (4) in a state in which the bump is crushed with interposition of an anisotropic conductive layer (10), in which an insulating resin (6m) is mixed with an inorganic filler (6f) and hardened, and

the anisotropic conductive layer (10) has a portion brought in contact with either the electronic component or the board, the portion having a smaller amount of inorganic filler than that of the other portion.

19. An electronic component unit, wherein an electrode (2) of an electronic component (1) is electrically connected to an electrode (5) of a circuit board (4) with a bump (3, 103) formed on the electrode (2) of the electronic component (1) and bonded to the electrode (5) of the circuit board (4) in a state in which the bump is crushed with interposition of an anisotropic conductive layer (10), in which an insulating resin (6m) is mixed with an inorganic filler (6f) and hardened, and

the anisotropic conductive layer (10) comprises:  
a first resin layer (6x), which is positioned in a portion

brought in contact with either the electronic component or the board and in which an insulating resin identical to the insulating resin is mixed with the inorganic filler; and a second resin layer (6y), which is in contact with the first resin layer and is made of an insulating resin whose amount of the inorganic filler is less than that of the first resin layer.

20. An electronic component mounting method as claimed in ~~(any one of)~~ claims 1 ~~through 9, and 14 through 17,~~ wherein the bump is a bump formed by plating or printing.

21. An electronic component unit as claimed in ~~(any one of)~~ claims 18 ~~through 19,~~ wherein the bump is a bump formed by plating or printing.

22. An electronic component mounting method as claimed in ~~(any one of)~~ claims 1 ~~through 9, 14 through 17 and 20,~~ wherein the anisotropic conductive layer is provided by mixing the solid insulating resin mixed with the inorganic filler with a conductive particle (10a) that has a mean diameter greater than a mean particle diameter of the inorganic filler.

23. An electronic component mounting apparatus as claimed in ~~(any one of)~~ claims 10 ~~through 12,~~ wherein the anisotropic conductive layer is provided by mixing the solid insulating resin mixed with the inorganic filler (6f) with a conductive particle (10a) that has a mean diameter

greater than a mean particle diameter of the inorganic filler.

24. An electronic component unit as claimed in ~~(any)~~  
~~(one of)~~ claims 18 ~~[through 19 and 21]~~, wherein the anisotropic  
 5 conductive layer is provided by mixing the solid insulating  
 resin mixed with the inorganic filler (6f) with a  
 conductive particle (10a) that has a mean diameter greater  
 than a mean particle diameter of the inorganic filler.

25. An electronic component mounting method  
 10 comprising:

forming a ball (96, 96a) at a tip of a metal wire  
 (95) by an electric spark similarly to wire bonding and  
 forming a bump (3, 103) by thermocompression-bonding the  
 formed ball to an electrode (2) of an electronic component  
 15 (1) with supersonic waves by means of a capillary (93,  
 193);

mounting the electronic component on a circuit  
 board (4) while aligning in position the electrode of the  
 electronic component with an electrode (5) of the board  
 20 with interposition of a solid or semi-solid insulating  
 resin layer (6, 306b) in which an insulating resin (306m)  
 is mixed with an inorganic filler (6f) without leveling the  
 formed bump; and

subsequently bonding the electronic component to  
 25 the circuit board by hardening the insulating resin layer